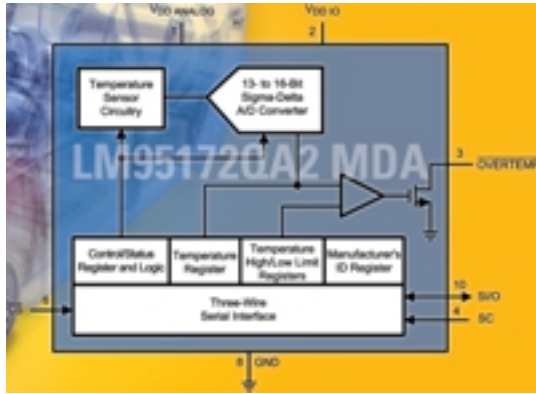


# Digital Temperature Sensor Achieves High Accuracy



Monitoring automotive system temperature from  $-40^{\circ}\text{C}$  to  $175^{\circ}\text{C}$ , National Semiconductor's LM95172Q digital temperature sensor delivers  $\pm 1^{\circ}\text{C}$  accuracy between  $130^{\circ}\text{C}$  and  $160^{\circ}\text{C}$ . The AEC-Q100 Grade 0-qualified component uses a serial peripheral interface (SPI), a MICROWIRE bus interface, and a 16-bit sigma-delta ADC. The thermal management sensor presents a conversion rate of 35 ms, resolution of  $0.008^{\circ}\text{C}/\text{LSB}$ , a temperature switch, and self diagnosis. Pricing is \$1.25 each in 1,000 quantities.

National Semiconductor  
800-272-9959, [www.national.com](http://www.national.com) [1]

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### Links:

[1] <http://www.national.com/>